

**Claims**

1. Device for detecting a thread during the detection of thread ends in a suction pipe through which air flows, with a sensor mechanism comprising a transmitter and a receiver, wherein a measuring field is formed between the transmitter and receiver and the suction pipe has a curvature in the region of the measuring field, characterised in that the measuring field (26) is arranged at least in the proximity of the smaller radius of the suction pipe (17), in that a recess (27) oriented in the running direction of the suction pipe (17) is present to form the measuring field (26), in that upstream and downstream from the measuring field (26), the suction pipe (17) is curved in such a way that the detected thread is tensed inside the recess (27) in such a way that it is spaced at least partly from the bottom (30) of the recess (27), in the measuring field (26).
2. Device according to claim 1, characterised in that the measuring field (26) lies substantially outside the curvature.
3. Device according to claim 1 or 2, characterised in that the suction pipe (17) is transparent.
4. Device according to claim 3, characterised in that polypropylene is used as the transparent material.
5. Device according to any one of claims 1 to 4, characterised in that the recess (27) begins so gradually in the flow direction that the air flow is not, or only insubstantially, disturbed.

6. Device according to any one of claims 1 to 5, characterised in that the recess (27) is so narrow that the movement of the thread brings about a clearing of the wall of the suction pipe (17) in the measuring field (26).